

ABSTRACT

The invention concerns an ultrahigh frequency emitting device, having:

- at least a first and a second microlaser (22, 24), emitting at two different frequencies ω_1 and ω_2 ,
- means of slaving the first and the second microlaser frequency-wise,
- an array of N elements ($N \geq 2$) (52, 54, 56, 58) placed on the path of the beam of the second laser, each element making it possible to impose a phase delay on the beam which passes through it,
- N means (26, 28, 30, 32) for mixing the beam emitted by the first laser and each of the N delayed beams, and for producing N signals of frequency $\omega_1 - \omega_2$,
- N antenna-forming means (34, 36, 38, 40) for emitting radiation at the frequency $\omega_1 - \omega_2$.